Vitamin **B9**



Vitamin B9 belongs to the group of water-soluble vitamins that cannot be produced by the human body and therefore must be supplied via diet. The method used for determination of vitamin B9 is a competitive enzyme immunoassay for the quantitative determination of added folic acid in different types of food, determined by ELISA.

Functions/Health effect:

Vitamin B9 plays a key role in all growth and cell division processes. It helps to form DNA and RNA and is involved in protein metabolism.

Vitamin B9 is also needed to produce healthy red blood cells and is critical during periods of rapid growth, such as during pregnancy and fetal development. Adequate folic acid intake during pregnancy is important to reduce the risk of birth defects called neural tube defects, such as spina bifida.

Sources:

Vitamin B9 is found in small amounts in many foods. Good sources include broccoli, Brussels sprouts, leafy green vegetables (cabbage, kale, spring greens, spinach), peas, chickpeas and kidney beans, peanuts, sunflower seeds, etc.

As a supplement, it is especially recommended for the time preceding and during the pregnancy. When pregnant, trying for a baby, or could get pregnant, it is recommended to take a 400µg folic acid supplement daily.

Did you know that?

Although sometimes used interchangeably, the terms "folate" and "folic acid" have slightly different meanings. Folate is a form of vitamin B9 occurring naturally in various foods. Folic acid is also a form of vitamin B9, but it does not occur naturally. Companies add folic acid to foods to make them more nutritious. Both types are nutritionally valuable, and most people have no trouble absorbing either form. Companies use folic acid in foods because, unlike folate, it remains stable when exposed to heat and light. This makes it ideal for adding to foods people cook, such as bread.

A complex interaction occurs between folic acid, vitamin B12, and iron. A deficiency of folic acid or vitamin B12 may mask the deficiency of iron; so, when taken as dietary supplements, the three need to be in balance.

Alcohol interferes with the absorption of vitamin B9 and speeds the rate it breaks down and is excreted from the body. Therefore, it is best to avoid drinking alcohol while taking folic acid.









